

REMARKS/ARGUMENTS

Claims 1 and 9 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Reconsideration of the rejection is respectfully requested.

Claims 1 and 9 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reconsideration of the rejection is respectfully requested.

Claims 1-6, 8, and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Snelson, U.S. Patent No. 6,739,937 B2, in view of Barlow, U.S. Patent No. 4,271, 628. Reconsideration of the rejection is respectfully requested.

Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Snelson in view of Barlow and in further view of Constantinesco, U.S. Patent No. 2,677,955. Reconsideration of the rejection is respectfully requested.

Claims 9-15 was rejected under 35 U.S.C. §103(a) as being unpatentable over Snelson in view of Barlow and in further view of Constantinesco. Reconsideration of the rejection is respectfully requested.

Independent claims 1 and 9, as well as dependent claims 2, 7, 10, and 15, have been amended to clarify them.

In addition, independent claims 1 and 9 have been amended to provide, in pertinent part, that each of the wires is curved in a first direction at a first intersection with a first group of two other wires and is curved in a second direction which is opposite to the first direction at a second intersection with a second group of two other wires, the second intersection being adjacent to the first intersection. Antecedent basis for this amendment can be found in the drawings of the application, for example, in Fig. 7. A copy of Fig. 7 is reproduced below in order to demonstrate that it indeed supports the amendment to independent claims 1 and 9.

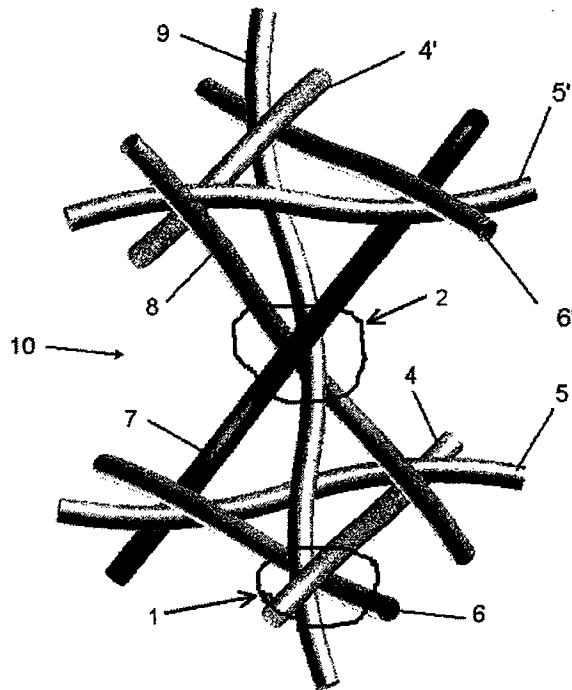


Figure 7

In particular, the above copy of Fig. 7 indicates adjacent intersections of wire 9 with wires 4 and 6 and with wires 7 and 8, respectively, as "1" and "2." From Fig. 7, it can be seen that at intersection "1," wire 9 curves in the opposite direction from its curvature at intersection "2."

Thus, it is respectfully submitted that the amendment to independent claims 1 and 9 is supported by the application as filed.

Although Snelson discloses, in Figs. 3 and 4, twist-tetrahedra, (see column 5, lines 32-44), those tetrahedra appear to be constructed of struts which bypass one another at locations of intersection of the struts. There appears to be no disclosure, teaching, or suggestion by Snelson to use wires, and to curve those wires in opposing directions at adjacent intersections, as provided in independent claims 1 and 9.

Furthermore, Snelson teaches that, "[t]here are two types of three-way weaving employed in the invention and each one produces a distinctly different form of space frame. Type-1, as shown in FIGS. 3, 4, 5 and 6, produces a matrix of tetrahedra alternating with truncated

tetrahedra,” (column 3, line 64, to column 4, line 1). Snelson further indicates that, “[t]his invention provides the instruction and means to spatially engage and superimpose these basic planar weaves using rod members and joining members in such a way as to produce unique three-dimensional space frames and related objects,” (column 3, lines 59-63; emphasis supplied).

The Examiner relied on Fig. 4 of Snelson in support of the rejection of independent claim 1, (see pages 3-5 of the Office Action). However, the teaching of Snelson that Type-1 three-way weaving as shown in Fig. 4 produces a matrix of tetrahedra alternating with truncated tetrahedra is clearly not what is being claimed in independent claims 1 and 9, providing for two regular tetrahedra forming each unit cell, the unit cell being repeated to form a plurality of unit cells in a three-dimensional pattern. Moreover, as indicated above, Snelson teaches that the three-dimensional space frames and related objects produced by the invention are unique, and, therefore, are not meant to be exemplary of a wide variety of such space frames and related objects that could be produced. Thus, it appears that Snelson, at least insofar as the Examiner relies upon it, teaches away from independent claims 1 and 9.

The Examiner applied Barlow, U.S. Patent No. 4,271,628, in support of the rejection of independent claim 1, since, “Barlow discloses that it is old in the art to form regular tetrahedron structures (Fig. 20), wherein the forming elements are intercrossed with each other at 60 degrees or 120 degrees, and the unit cell is repeated in a three-dimensional pattern, thereby forming a truss-type structure,” (Office Action, page 5, lines 1-4). However, the disclosure of Barlow regarding regular tetrahedron structures does not remedy the deficiency of Snelson teaching that Type-1 weaving employed in the invention and shown in Figs. 3, 4, 5, and 6 produces a matrix of tetrahedra alternating with truncated tetrahedra. Such alternation of tetrahedra with truncated tetrahedra does not fulfill the requirements of independent claims 1 and 9 providing for two regular tetrahedra forming each unit cell, the unit cell being repeated to form a plurality of unit cells in a three-dimensional pattern.

Since each of claims 2-5, 7, 10-13, and 15 is directly dependent upon one of independent claims 1 and 9, the arguments recited above with respect to independent claims 1 and 9 apply equally to claims 2-5, 7, 10-13, and 15.

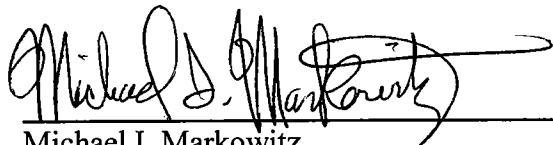
With regard to dependent claims 8 and 16, the Examiner indicates merely that they are rejected as they depend from rejected claim 1, (Office Action, page 6, line 11). However, in the Office Action mailed on September 15, 2009 in the above-identified application, the Examiner indicated on page 5 thereof that claims 8 and 16 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 8 and 16 have been rewritten in independent form, but based upon independent claims 1 and 9 as they appeared in the Amendment filed in the above-identified application on May 5, 2009, since that was the Amendment immediately prior to the Office Action mailed on September 15, 2009 where it was indicated that claims 8 and 16 contain allowable subject matter. Therefore, it is respectfully submitted that claims 8 and 16 are allowable.

In view of the foregoing amendments and remarks, allowance of claims 1-5, 7-13, and 15-16 is respectfully requested.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read "Michael I. Markowitz", is written over a horizontal line.

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